Rounding

Rounding is the approximation of a value to a specified number of decimal places, or significant digits.

For our purposes at electronics school, we will round to three digits.
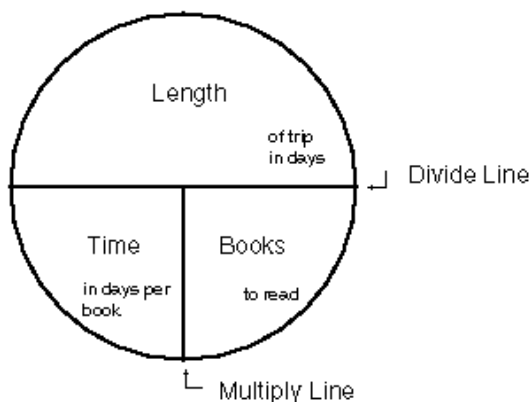
We know Pi to be 3.1415927.

6. If we were to round Pi to 3 digits, we would have: _____

Pi x 4 would be 12.566371.

7. Round this number to 3 digits: _____

**Solving for the
Unknown
Quantity**

When solving for an unknown, we can use the known quantities to find the one we are looking for.

To make our calculations easier to visualize, we can use a chart as illustrated above.

Using the chart, we can calculate for any of the unknown variableif we know the other two.

To use a chart of this type, cover the unknown quantity (what we are trying to find) with your finger or thumb. What is left showing is our equation.

4. I know it takes me 5 days to read an average length paperback book of 400 pages.

    If I am going underway for an 8 week patrol, how many books would I need to bring along for the trip in order to have enough books to read on the patrol?

    _____

5. I brought 19 books along for a 128 dayAlaska patrol. Is this enough books for the patrol?

    Yes   No

Practical Mathematics Review Quiz

Power of 10

1. Express the following numbers in powers of 10.

   Example:

   900   9×10^2

   a. 320   _____

   b. 400,000   _____

   c. 1,000,000   _____

   d. 1,200   _____

Converting Powers of 10

2. Convert the following powers of 10 to conventional numbers.

   Example:

   6.8×10^3 6800

   a. 9.9×10^3 _____

   b. 10^5 _____

   c. 3.64×10^2 _____

   d. 10^{-4} _____

Unit Conversions

3. Convert the quantities listed below.

   Example:

   1000 milliseconds =   1   second

   a. 30 milliliters =   _____ liters

   b. 3800 meters =   _____ kilometers

   c. 490 microseconds =   _____ seconds

   d. 7.5 grams =   _____ milligrams

   (continued)